

LBNL Emergency Services Program



*Ernest Orlando Lawrence
Berkeley National Laboratory*

OCTOBER 11, 2010 POWER OUTAGE AFTER ACTION REPORT

**October 2010
Security Emergency Operations Group
Environment, Safety, and Health Division**

LBNL/Power Outage

Approved By: Royce E. Saunders 11-9-2010

Royce Saunders
Emergency Services Manager
Environment, Health and Safety Division

Date

Approved By: Dan Lunsford 9 NOV 10

Dan Lunsford
Security and Emergency Operations Group Leader
Environment, Health and Safety Division

Date

Approved By: Doug Fleming 11-20-10

Doug Fleming
Director, Environment, Health and Safety Division

Date

Caveat

The emergency response After Action Report (AAR) is not a substitute for an ORPS Report or a Root Cause Analysis. Whereas the AAR may be prepared in conjunction with other reports relating to a single event, the purpose of the AAR is to review LBNL's emergency response and recommend improvements to the overall comprehensive emergency management system.

Incident Summary

LBNL experienced a widespread power outage October 11, 2010 at approximately 10:05 a.m. Blackberry Gate was notified of power outages at 10:11 am. The power outage was caused an accidental overload of a main circuit breaker. EOC staff were first made aware of the event from Building Managers via the Emergency Building Radios. The LBNL EOC was activated at 10:15 a.m. Approximately one-third of the on-site lab buildings were affected by the outage. No off-site buildings were affected. The backup generator for the LBNL Trunked Radio System performed and there was no operation interruption. Back-up generators for the affected buildings operated as expected with the exception of Building 2. As reported by the Building Emergency Team, the back-up generator activated briefly then shut down. This meant that the fume hoods in Building 2 were not operating. The Building 2 Building Emergency Team evacuated staff as a precaution until the power was restored and the fume hood system could be inspected. Power was restored to the lab at approximately 11:40 AM. John Seabury, Industrial Hygiene and a member of the Building Emergency Team evaluated the fume hoods in Building 2. Although the fume hood system needed some additional repairs, the building was safe for staff to return to work. Fume hood operations in Building 2 were halted until necessary repairs were completed. All Building 2 employees were allowed to reenter the building at approximately 1:30 p.m. Prior to reentry, Building Emergency Team members posted signs throughout the building and verbally informed returning staff not to use the fume hoods until the system was fully operational. There were sporadic reports of telephone and computer network outage which have been corrected. The LBNL EOC was deactivated at 12:40 p.m. There were no reported injuries resulting from this event.

The EOC staff rapidly responded to the EOC and worked well together as a team. They were able to setup and perform their functions quickly. IT was able to arrive quickly to the EOC. The training that was provided recently - designating roles and functions, worked well. The use of support staff was a huge success – the status boards were used to track information and were extremely legible and the assistance when needed to access the laptops was invaluable. The phones and the PA systems worked well, with the phones especially providing better quality of voice communications. We had much better communications between the EOC, Facilities DOC and Blackberry Gate. The BET members handled the situation professionally and efficiently.

Findings

Although there are no contract compliance related findings, there are seventeen observations with corrective action recommendations for emergency response issues.

Observations & Recommended Improvements

Observations	Recommendations
During the event, members of the EOC, BM/BET competed for the use of the radio channel to provide situational information and direction.	<p>EOC and BM/BET need an additional talk group for communications during an event and all radio holders additional radio protocol training.</p> <p>Responsible Organizations: Emergency Services Program and Facilities Completion Date: 02/28/11</p>
Everbridge notification didn't make notifications timely or accurately.	<p>Work with Everbridge to reduce the time for sending out an accurate and timely message using all available methods of electronic communication.</p> <p>Responsible Organizations: Emergency Services Program Completion Date: 02/28/11</p>
Within the EOC structure there was some noticeable duplication of work.	<p>Review EOC procedures, roles and responsibilities, make necessary procedural changes and update related training modules.</p> <p>Responsible Organizations: Emergency Services Program Completion Date: 02/28/11</p>
There is no policy allowing for the purchase of food for EOC staff or evacuated staff during either an emergency event or an emergency exercise.	<p>Develop policy allowing for the purchase of food for EOC staff and evacuated staff during either an emergency event or an emergency exercise.</p> <p>Responsible Organizations: Emergency Services Program Completion Date: 04/29/11</p>
Evacuated staff did not have access to water or food during the emergency event.	<p>Insert into the Logistics Section checklist to distribute food and water to the EOC staff and evacuated staff during an emergency event or an emergency exercise.</p> <p>Responsible Organizations: Emergency Services Program Completion Date: 02/28/11</p>
EOC computers are operating noticeably slower than other computers and need updates for some programs.	<p>Consult with IT Division to speed up the EOC computers, obtain programmatic updates, and establish a replacement plan for EOC computers.</p> <p>Responsible Organizations: Emergency Services Program Completion Date: 02/28/11</p>
Logistics does not have critical contact information for Facilities Division or third-party vendors for supplies or equipment.	<p>EOC staff to work with Logistics Section staff to update and develop critical logistical contact lists.</p> <p>Responsible Organizations: Emergency Services Program Completion Date: 02/28/11</p>
Web EOC does not have a hazard description for power outages and selections are not in alphabetical order.	<p>Add power outage as an event description and list event descriptions in alphabetical order.</p> <p>Responsible Organizations: Emergency Services</p>

Observations	Recommendations
	<p>Program Completion Date: 02/28/11</p>
<p>Lab staff and BET members remain unsure when to evacuate during the power outage events.</p>	<p>EOC staff to work with Public Affairs to develop a communications campaign restating the policy on evacuations during a power outage.</p> <p>Responsible Organizations: Emergency Services Program Completion Date: 02/28/11</p>
<p>EOC contact information is not available to the Executive Policy Team and Divisional / Departmental Operations Centers.</p>	<p>Provide the Executive Policy Team and the DOCs the EOC contact information.</p> <p>Responsible Organizations: Emergency Services Program Completion Date: 02/28/11</p>
<p>Public Address communication scripts need to be improved.</p>	<p>EOC staff to work with Public Affairs to review and improve all of the EOC communications scripts and add scripts as needed to the Everbridge system.</p> <p>Responsible Organizations: Emergency Services Program Completion Date: 02/28/11</p>
<p>Executive Policy Team does not have communication linkages to the EOC.</p>	<p>EOC staff, working through the EH&S chain of command, establish appropriate communication linkages to the Executive Policy Team.</p> <p>Responsible Organizations: Emergency Services Program Completion Date: 02/28/11</p>
<p>EOC Director was the sole point of communication with the lab staff, Executive Policy Team and the Building Emergency Teams during this event.</p>	<p>EOC staff to review and revise as needed the communications procedures during an emergency event such that the EOC Director is not the sole point of communications outside of the EOC.</p> <p>Responsible Organizations: Emergency Services Program Completion Date: 02/28/11</p>
<p>Communications was a problem for the employees in B70 assembly area. They couldn't hear information that was provided over the PA system, because there aren't speakers in the emergency assembly areas.</p>	<p>Review options for dissemination of information in emergency assembly areas.</p> <p>Responsible Organizations: Emergency Services Program Completion Date: 02/28/11</p>
<p>UC Campus were unable to provide accurate information for the restoration of power on their side of the incident. (kept saying "within the next 10 minutes" for nearly an hour.</p>	<p>No action required.</p>
<p>Flashlight had dead batteries, employee used laptop for light to retrieve personal items.</p>	<p>Remind all Lab employees and BET members to check their emergency preparedness equipment for readiness in November and April (time change) of each year. (maybe ask PIO to provide TABL article?)</p>

Observations	Recommendations
	Responsible Organizations: Emergency Services Program Completion Date: 02/28/11
Employee noted that BET member wasn't in the office and suggests that there be backup BET members.	Review B70 BET Lead(s) and ensure that backup members are assigned. Responsible Organizations: Emergency Services Program Completion Date: 02/28/11

EOC Activation and Hotwash Participants

Reilly, Joseph
 Jiles, Pam
 Black, Steve
 Wahl, Linnea
 Boynton, Anne
 Stoner, John
 Yarris, Lynn
 Houston, Sam
 Thorson, Pat
 Hartnett, Kevin

McClellan, Jan
 Piermattei, Gary
 Lichty, Peter
 Madison, Sharmika
 Welcome, Tammy
 Speros, John
 Gregory, Richard
 Saunders, Rocky
 Leffingwell, Karen

Tsui, Allen
 Wynne, Sara
 Blodgett, Paul
 Flemming, Doug
 Sgouros, Nick
 Weiss, Phil
 Erwood, Keith
 Naumen, Greg
 Chen, David